

**WHAT IS CLAIMED IS:**

1. An isolated natural host defense factor (HDFX).
- 5 2. The isolated HDFX of claim 1, wherein said HDFX is of a mammalian origin.
3. The isolated HDFX of claim 2, wherein said HDFX is murine or rat HDFX.
- 10 4. The isolated HDFX of claim 1, wherein said HDFX is water soluble, and is resistant to pH 5.5 and to boiling for 10 minutes.
5. A pharmaceutical composition comprising the isolated HDFX of any one of claims 1-3, and a pharmaceutically acceptable carrier.
- 15 6. A method of enhancing the ability of a subject to fight against or recover from a disease caused by a pathogen, comprising administering an effective amount of HDFX to the animal before or after exposure to the pathogen.
- 20 7. The method of claim 6, wherein said subject is a mammal.
8. The method of claim 7, wherein said mammal is human.
9. The method of claim 6, wherein said subject is a companion animal.
- 25 10. The method of claim 6, wherein said pathogen is a bacterial, fungal, mycoplasm, rickettsial, parasite, prion-like or viral pathogen.
- 30 11. The method of claim 10, wherein said pathogen is selected from anthrax, HIV or a hepatitis virus.

12. The method of claim 6, wherein said disease is selected from smallpox, plague, botulism, hemorrhagic fever, AIDS, fever, severe acute respiratory syndrome, a disease caused by anthrax, or a disease caused by hepatitis B virus, or new evolving diseases.
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13. A method of enhancing the ability of a subject to sustain and survive an insult by administering an effective amount of HDFX to the subject prior to or after the insult.
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14. The method of claim 13, wherein said insult is selected from the group consisting of trauma, hemorrhage, ischemic strokes, sepsis, burns, multiple organ failure, battle wounds, and major surgery.